

R E M A R K S

Reconsideration of this application, as amended, is respectfully requested.

THE SPECIFICATION

The specification has been amended to reflect the abandonment of the parent applications of the present application, as required by the Examiner. No new matter has been added, and it is respectfully requested that the amendments to the specification be approved and entered, and that the objection to the specification be withdrawn.

THE CLAIMS

The claims have been amended to make some minor grammatical improvements and to correct some minor antecedent basis problems so as to put them in better form for issuance in a U.S. patent.

In addition, claims 57-59 have been amended to depend from claim 52, instead of from claim 55, to put claims 57-59 in better dependent form.

The informalities pointed out by the Examiner in claims 1 and 61 have been corrected, and it is respectfully submitted that all of the claims now fully comply with the requirements of 35 USC 101 and 35 USC 112, and it is respectfully requested that the rejections thereunder be withdrawn.

No new matter has been added, and it is respectfully requested that the amendments to the claims be approved and entered.

It is respectfully submitted, moreover, that the amendments to the claims are not related to patentability, and do not narrow the scope of the claims either literally or under the doctrine of equivalents.

THE PRIOR ART REJECTION

Claims 1, 52, 53 and 61 were rejected under 35 USC 102 as being anticipated by USP 5,908,420 ("Parins et al"); claims 1 and 49-55 were rejected under 35 USC 102 as being anticipated by USP 5,151,102 ("Kamiyama et al"); claims 1 and 49-54 were rejected under 35 USC 102 as being anticipated by USP 6,679,882 ("Kornerup"); claims 1, 49-56 and 61-69 were rejected under 35 USC 102 as being anticipated by USP 6,273,887 ("Yamauchi et al"); claims 1, 49-54 and 61-68 were rejected under 35 USC 102 as being anticipated by USP 6,174,309 ("Wrublewski et al"); claims 61-65 and 67-69 were rejected under 35 USC 102 as being anticipated by USP 6,113,598 ("Baker"); claims 55-60 and 69 were rejected under 35 USC 103 as being obvious in view of the combination of Wrublewski et al and Baker; claims 57-59 were rejected under 35 USC 103 as being obvious in view of the combination of Yamauchi et al and Baker; and claims 49-60 were rejected under 35 USC 103

as being obvious in view of the combination of Baker and Kamiyama et al. These rejections, however, are all respectfully traversed.

According to the claimed present invention, a heating coagulating/cutting tool is provided. That is, according to the claimed present invention, a heat generating portion or heating unit generates heat, which is applied to tissue to coagulate and/or cut the tissue.

By contrast, all of the cited references relate to electrosurgical coagulating/cutting instruments, and do not disclose, teach or suggest the heating performed according to the claimed present invention.

More specifically, Parins et al discloses surgical scissors which apply RF current to tissue so as to coagulate the tissue immediately before the tissue is cut with scissor blades. See the section of Parins et al labeled "OPERATION" at columns 5 and 6 thereof.

Kamiyama et al, moreover, discloses a bipolar type instrument in which current is caused to flow between electrodes at the grasping portions of forceps grasping a blood vessel to cauterize/coagulate/stanch a blood vessel. And it is respectfully pointed out that Kamiyama et al discloses that the invention thereof prevents temperature from rising and prevents heat from being transferred to the blood vessel. See, for

example, the Summary of the Invention section of Kamiyama et al. Accordingly, it is respectfully submitted that Kamiyama et al in fact teaches away from the claimed present invention.

Kornerup discloses coagulating and cutting tissue by supplying current thereto.

Yamauchi et al, Wrublewski et al, and Baker, moreover, disclose bipolar type instruments which coagulate and cut tissue by supplying high-frequency current thereto.

Thus, the cited references all disclose coagulating or cutting tissue by supplying current to the tissue.

By contrast, according to the present invention a portion of the instrument is heated and the tissue is coagulated or cut by applying heat thereto.

In particular, according to claim 1, a heat generating portion is provided at the grasp portion, and generates heat in accordance with current supplied thereto to coagulate the patient's body tissue grasped between the grasp members. Thus, the medical treatment instrument according to claim 1 does not supply current to living tissue. Instead, the treatment instrument itself generates heat when supplied with current, and the heat is supplied to the tissue. Accordingly, it is respectfully submitted that the present invention as recited in claim 1 clearly differs from the electrosurgical instruments

disclosed by the cited references, which supply current to living tissue.

According to the present invention as recited in independent claim 49, the medical instrument comprises a heating unit which heats a first engaging portion (which holds tissue) when energized. It is respectfully submitted that none of the cited references disclose a heating unit that heats a member that holds tissue, as recited in claim 49. It is respectfully submitted, therefore, that the cited references clearly do not disclose, teach or suggest a control element as recited in claim 49, which comprises a current supplying element and first and second setting elements to set temperatures of the heating unit to a temperature at which living tissue is coagulated and a temperature at which living tissue is incised. And in this connection, it is respectfully submitted that although the examiner has cited Kamiyama et al and Baker in combination as disclosing the features of independent claim 49, the cited combination at best discloses a structure for varying a supplied current value in accordance with whether tissue is to be cut or coagulated. In addition, as pointed out hereinabove, Kamiyama et al teaches away from transferring heat from an instrument to tissue, and it is respectfully submitted therefore that Kamiyama et al is not properly combinable with any of the prior art of

record to achieve a structure whereby tissue is heated in the manner of the claimed present invention.

Independent claim 52, moreover, recites a heating unit which heats a first engaging portion when energized, wherein the first engaging portion is adapted to hold living tissue and has a first engaging surface comprising a protrusion. It is respectfully submitted, as pointed out hereinabove, that none of the cited references disclose a heating unit that heats a portion of a treatment instrument itself. In addition, it is respectfully submitted that the combination of Kamiyama et al and Baker at best merely suggests a bipolar electrosurgical cutting instrument, and that Kamiyama et al teaches away from heating a portion of a treatment instrument to coagulate and incise tissue as recited in claim 52.

Finally, independent claim 61 recites a pair of holding portions to hold living tissue, wherein one of the holding portions comprises a heat generating portion which generates heat that is conducted to the contact surface of the holding portion, and wherein the contact surface of the holding portion having the heat generating portion has a contact area with the living tissue that is smaller than a contact area with the living tissue of the contact surface of the holding portion that does not include the heat generating portion. It is respectfully submitted that none

of the cited references disclose generating heat in an instrument and conducting the heat to a contact surface that contacts living tissue. And it is respectfully submitted that the cited references clearly do not disclose, teach or suggest forming a holding portion with a heat generating portion to have a contact surface with a different contact area than a holding portion that does not have the heat generating portion.

In summary, it is respectfully submitted that the cited references all relate to supplying current to tissue to coagulate or cut tissue, and that none of the cited references disclose, teach or suggest generating heat at a portion of the treatment instrument itself, and supplying heat to the tissue in the manner of the claimed present invention.

Accordingly, it is respectfully submitted that the claimed present invention clearly patentably distinguishes over all of the prior art of record, taken singly or in any combination consistent with the respective fair teachings thereof, under 35 USC 102 as well as under 35 USC 103.

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In view of the foregoing, entry of this Amendment, allowance of the claims and the passing of this application to issue are respectfully solicited.

If the Examiner has any comments, questions, objections or recommendations, the Examiner is invited to telephone the undersigned at the telephone number given below for prompt action.

Respectfully submitted,

/Douglas Holtz/

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